

DETAILED ACTION

Acknowledgements

1. This action is in reply to the amendments to the claims and remarks filed on 29 September 2009 (“09 Sept Response”).
2. Claims 8-11, 14, 15, 39, 40, 51, and 52 are currently pending and have been examined.
3. This Office Action is given Paper No. 20100108. This Paper No. is for reference purposes only.

Claim Rejections - 35 USC §103

4. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
5. Claims 8-11, 14, 15, 39, 40, 51, and 52 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wheeler et al. (U.S. 2002/0026575 A1) (“Wheeler”), in view of Villicana et al. (U.S. 6,819,098 B2) (“Villicana”), and in further view of Hill et al. (U.S. 6,161,198 A) (“Hill”).

Regarding Claims 8 and 14

6. Wheeler discloses:

a system comprising a central computer system, a database accessible by said central computer system, a plurality of devices, and a communication network connecting each device within said plurality of devices with said central computer system, wherein the communication network enables each device within the plurality of devices to transmit data to said central computer system (¶¶ 0113 and 0114),

said database stores a plurality of data records,

each data record in said plurality of data records including an account identifier and a public cryptographic key of said device, (¶¶ 0113 and 0114);

each of said devices includes data storage storing a private cryptographic key of said device and a microprocessor programmed to access said data storage, to encrypt a message with said private cryptographic key, and to transmit said message encrypted with said private cryptographic key, wherein said message includes an alphanumeric value together with other data, over said communication network to said central computer system, wherein the message encrypted with said private cryptographic key is decrypted with said public cryptographic key (¶¶ 0004, 0005, 0113, 0115-0117, and 0172), and

said central computer system includes a processor programmed to receive said message encrypted with said private cryptographic key, to decrypt with said public cryptographic key of said meter, said message encrypted with said private cryptographic key, forming a decrypted message, and to compare a version of said alphanumeric value from said decrypted message with

an unencrypted version of said alphanumeric value (¶¶ 0004, 0005, 0113, 0115-0117, and 0172),
and

 said microprocessor in each device in said plurality of devices is additionally
programmed to generate an ordered sequence of values for use as each said alphanumeric value,
and to transmit, on a periodic basis, to said central computer system, a next value from said
ordered sequence of alphanumeric values, in an unencrypted form and as combined with said
other data and encrypted with said private cryptographic key (¶¶ 0004, 0005, 0113, 0115-0117,
and 0172), and

 said processor within said central computer system is additionally programmed to receive
said unencrypted form of said value in said ordered sequence of values as the unencrypted
version of said alphanumeric value, and to store data derived from said message in response to
determining that said decrypted message matches said unencrypted version of said message (¶¶
0004, 0005, 0113, 0115-0117, 0170, and 0172).

7. Wheeler does not directly disclose:

 a plurality of meters;
 each data record in said plurality of data records including a meter identifier, wherein the
meter identifier identifies a meter within said plurality of meters associated with said data record;
 wherein said message includes a data value representing a measured usage of a utility
product; and

 said processor within said central computer system is additionally programmed to
determine whether said alphanumeric value received in said message is the next value following,
within said ordered sequence of values, a value most recently transmitted as said alphanumeric

value from said meter, and to store data derived from said value representing a measured usage of said utility product within said data record including said meter identifier identifying said meter in response to determining that said alphanumeric value is the next value following said value most recently transmitted as said alphanumeric value from said meter.

8. Villicana teaches:

a plurality of meters (“utility meters **113**”; see also fig. 1 with associated text);
each data record in a plurality of data records including a meter identifier, wherein the meter identifier identifies a meter within said plurality of meters associated with said data record (c. 5 and 6);
wherein a message includes a data value representing a measured usage of a utility product (c. 4); and

a processor within a central computer system programmed to store data derived from said value representing a measured usage of said utility product within said data record including said meter identifier identifying said meter (c. 3 and 4).

9. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Wheeler by combining the functionality of the devices of Wheeler with the utility usage reporting meters and central computer system of Villicana. One would have been motivated to do so in order to strengthen the security of Villicana’s usage reporting method.

10. Hill teaches:

a processor within a central computer system programmed to determine whether a alphanumeric value received in a message is the next value following, within an ordered

sequence of values, a value most recently transmitted as said alphanumeric value from a client device, and to store data derived from said message within a data record in response to determining that said alphanumeric value is the next value following said value most recently transmitted as said alphanumeric value from said client device (abstract, and fig. 6 with associated text).

11. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the alphanumeric value of Wheeler to include the alphanumeric value of Hill (which is sent from a client to a host), and to modify the central computer system (*i.e.*, host) of Wheeler to include the functionality of Hill's central computer system. One would have been motivated to do so in order to eliminate duplicate entries in the database.

Regarding Claims 9-11 and 15

12. The combination of Wheeler, Villicana, and Hill discloses the limitations of claims 8, 14, 39, and 51, as shown above, and further discloses the limitations of:

Claims 9 and 15: The system of claim 8, wherein said central computer system is additionally programmed to read said version of said alphanumeric value previously transmitted from said meter from said data record including said meter identifier identifying said meter and to write said alphanumeric value received in said message to said data record including said meter identifier (Hill, c. 8; see also Villicana, c. 1, l. 50-60; and c. 5, l. 61 – c. 6, l. 13; and Wheeler, ¶0115);

Claim 10: The system of claim 8, wherein said central computer system is additionally programmed to receive a transmission over said communication network from an additional

meter, to recognize a set up request code transmitted from said additional meter, to receive a meter identifier and a public cryptographic key from said additional meter, and to record said meter identifier and said public cryptographic key received from said additional meter in an additional data record within said database (Villicana, c. 6, l. 20+; and Wheeler, ¶ 0118); and

Claim 11: The system of claim 8, additionally comprising a server computer having an interface for communicating over a computer network with at least one client computer and an interface for accessing said database, wherein said server computer is programmed to receive data from said client computer including a meter identifier stored in a data record within said database, and to write data received from said client computer to said data record within said database (see at least Villicana, c. 3, l. 60+; c. 7, l. 21 – c. 8, l. 26; and fig. 7 with associated text).

Regarding Claims 39, 40, 51, and 52

13. Claims 39, 40, 51, and 52 are directed to a method and a computer-readable medium of the above system claims and are not patentably distinct. Accordingly, claims 39, 40, 51, and 52 are rejected in substantially the same manner as there corresponding system claims, as described above.

Response to Arguments

14. Applicants' arguments with respect to the examined claims have been considered but are moot in view of the new ground of rejection.

Conclusion

15. Applicants' amendment filed in the 09 Sept Response necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. Because this application is now final, Applicants are reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by the Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112, 1st paragraph written description and enablement, §112, 2nd paragraph indefiniteness, and §102 and §103, prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Jacob C. Coppola whose telephone number is (571) 270-3922. The Examiner can normally be reached on Monday-Friday, 9:00 a.m. - 5:00 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at (571) 272-6779.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/JACOB C. COPPOLA/
Patent Examiner, Art Unit 3621
January 8, 2010